

The Ballarat Naturalist

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December meeting: Members' Images of Life Cycles

Contributed by Carol Hall

Pairs of Peregrine Falcons have nested at Devil's Kitchen for many years. The nest is located on a ledge high on a basalt cliff above the Woody Yaloak Creek. Visiting 2-3 times per fortnight between October 23rd – December 14th in 2019, I was able to follow the development of three chicks and enjoy watching the behaviour of the family. I am not sure whether the female was sitting on eggs or tiny nestlings when I first visited as the ledge is above eye level, but eventually the three chicks were plain to see by November 13th. From white down to the emergence of immature plumage, they began experimentally exercising their wings, the eldest always taking precedence for activities.

The male would hunt for prey, bringing in parrots such as an Eastern Rosella, and drop it at the nest where the female would seize it. She would then dismember the bird and feed the demanding chicks. Remarkably all three chicks received fairly equal amounts of food and grew steadily, all fledging successfully. They left the nest and perched on neighbouring rocks by hopping and wing flapping, staying together as a trio and waiting for food. Eventually they all flew, and would learn to hunt for themselves.



Sequential development of the three Peregrine Falcon Chicks





Member's Images, Friday 2nd December 2022- Family Album By Emily Noble

One of the things I have found particularly rewarding over the last few years of “field natting” is piecing together the various stages of life for insects, plants and birds. There is still a myriad of gaps to be filled in my knowledge, but here are a few steps in the lives of local moths, butterflies, wildflowers, birds and beetles.

The beautiful Black and White Tiger Moth, *Arctodes glatignyi*, is fairly common around Ballarat and enjoys the nectar from a wide range of wildflowers. The female moth lays her white, pearlescent eggs underneath a suspended fallen log, and they hatch and grow into a red-nosed caterpillar covered in fluffy-looking, two-tone brown spines.

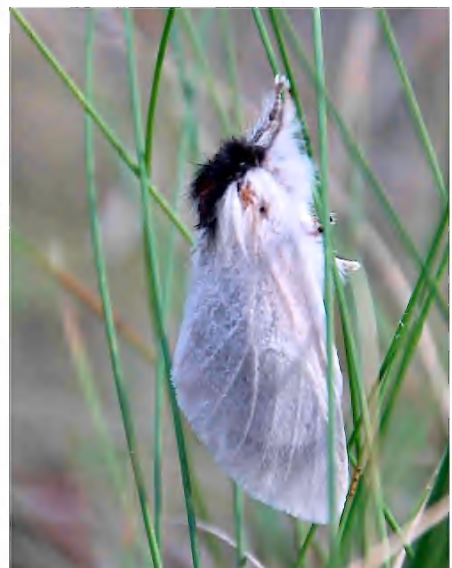


They have a penchant for orchids and other wildflowers as well as Dandelion and fireweed leaves.



Caterpillar of Black & White Tiger Moth enjoying a Sun Orchid for brekky

The fuzzy, black-headed Sparshall's Moth, *Trichiocercus sparshalli*, is a spectacular caterpillar as a youngster and pupates in a silk cocoon amongst leaf litter. The caterpillars have an array of varied length pale hairs, and black, red and cream patterning, and enjoy the leaves of wattles, banksias and eucalypts.





Sparshall's Moth caterpillar

The *Pterolocera* caterpillar (I love its dinosaur-like name) has fairly short, rusty hairs all over, yellow spots along its sides and a purplish head, and its favourite food is grass. It grows into the handsome Grass Anthelid Moth, with its striking dark vein markings. The males' large, feathery antennae help it track down a female.



Pterolocera sp. caterpillar eating grass

Below:
Male Grass Anthelid Moth, *Pterolocera* sp.



The seeds of a Magenta Stork's-bill have a distinctive corkscrew and two layers of fine hairs to help it drift away from the parent plant in the breeze. Their vibrant flowers are a feature of grassy woodland understoreys in summer.

Last winter, a pair of Powerful Owls nested at Clarkesdale Bird Sanctuary, and it was the first time I'd had the pleasure of seeing a juvenile Powerful Owl, with its white, fluffy plumage quite unlike the wonderfully-camouflaging brown and cream patternings on the adult's feathers, echoing the differences in plumage of juvenile and adult Tawny Frogmouths.

The Mistletoe Moth, *Comocrus behri*, is a day-flying moth that feeds on the nectar from eucalypt and mistletoe flowers. It has black wings with wonderful white patterning and orange and black stripes and patches on its body. It's yellow, almost pineapple-shaped eggs are laid in clusters on mistletoe leaves, and hatch into spectacular black and white-striped caterpillars with orange heads and legs. After a good feed on mistletoe leaves, they can grow to more than 7cm long.

Dotted Paropsine Leaf Beetles, *Paropsis atomaria*, eat, mate and lay their eggs on eucalypts. The eggs are laid in tubular clusters around the stem of eucalypt branchlets. Their larvae start off looking like lemon-yellow caterpillars with black heads and “tails”, with their bodies taking-on more black shadings as they age. Like sawfly larvae, they writhe their tail ends when threatened and pupate in the ground.

I'm looking forward to filling in more gaps in these family albums with the assistance of my field nat friends as time goes on.



Magenta Stork's-bill's corkscrew seed



Male Magenta Stork's-bill flower



Female Magenta Stork's-bill flower



Mistletoe Moth feeding on
Drooping Mistletoe flower



Mistletoe Moth eggs
on mistletoe leaf



Mistletoe Moth caterpillar eating mistletoe leaf



Tawny Frogmouth pair with youngster in centre



Powerful Owl father (right) and youngster

December Christmas Break up Excursion and Picnic

Thanks to Kathy and Bill Elder we enjoyed the Christmas Break-up at their home, “Stringybark”, in Scarsdale. They had everything planned and ready for us - even the weather. About 20 people were present for this outing on the Elders’ property, followed by our picnic teas.

Bill Elder, with the aid of Emily as a second reference, was the guide for our group, and another group was guided along the tracks to good sites by Kathy Elder.

With plenty of insect repellent slathered on, the walk along the well-formed tracks was very pleasant under the shade of Eucalyptus and other large trees. A few wet patches had to be avoided.

In my group we recorded the plants noted in the list shown on p.10. For early December the green vegetation and the number of flowers observed were amazing though not surprising after all the rain we had had in the past months.

The names of birds seen are also listed below, though many more were heard.

My brother Les has given me the names of the fungi seen during our walk and a description of their immediate environment.

- Amanita species* White medium sized fruit bodies.
- Coltricia australica* Fairy Stools. Woody and tough with pored under surface.
- Rhodofomitopsis lilacinogilva* Polypore bracket with lilac pink edge and under surface.
- Russula species* Cream coloured.
- Stereum species* Large numbers of dried leathery brackets on a log. The under surface was smooth with orange tint.

The property is on Skipper Rd, named after the tiny butterflies seen in the area, a few of which were glimpsed during the walk. Numerous other insect were seen including Common Brown Butterfly, Yellow Admiral, Blue Damselfly, Drone Fly, and a Melyrid Beetle.

Some Birds seen on the excursion:

Scientific Name	Common name	Family
<i>Todiramphus santus</i>	Sacred Kingfisher	Alcedinidae
<i>Oriolus sagittatus</i>	Olive-backed Oriole	Oriolidae
<i>Pachycephala rufiventris</i>	Rufous Whistler	Pachycephalidae
<i>Pardalotus punctatus</i>	Spotted Pardalote	Pardalotidae
<i>Platycercus elegans</i>	Crimson Rosella	Psittacidae
<i>Chrysococcyx lucidus</i>	Shining Bronze Cuckoo	Cuculidae

Some Flora noted by Bill's group

Scientific name	Family	Common name
<i>Wahlenbergia stricta</i>	Campanulaceae	Australian Bluebell
<i>Burchardia umbellata</i>	Colchicaceae	Milk Maid
<i>Drosera auriculata</i>	Droseraceae	Tall Sundew
<i>Gompholobium huegelii</i>	Fabaceae	Common Wedge-pea
<i>Platylobium obtusangulum</i>	Fabaceae	Common Flat-pea
<i>Brunonia australis</i>	Goodeneaceae	Blue Pincushion
<i>Goodenia lanata</i>	Goodeneaceae	Trailing Goodenia
<i>Goodenia geniculata</i>	Goodeneaceae	Bent Goodenia
<i>Dichopogon strictus</i>	Liliaceae	Chocolate Lily
<i>Xanthorrhoea minor lutea</i>	Xanthorrhoeaceae	Small Grass-tree
<i>Gompholobium huegelii</i>	Fabaceae	Common Wedge-pea
<i>Platylobium obtusangulum</i>	Fabaceae	Common Flat-pea
<i>Acacia mearnsii</i>	Mimosaceae	Late Black Wattle
<i>Eucalyptus dives</i>	Myrtaceae	Broad-leaved Peppermint
<i>Eucalyptus radiata</i>	Myrtaceae	Narrow-leaved Peppermint
<i>Eucalyptus yarraensis</i>	Myrtaceae	Yarra Gum
<i>Leptospermum myrsinoides</i>	Myrtaceae	Silky (Heath) Tea Tree
<i>Chiloglottis valida</i>	Orchidaceae	Common Bird-orchid
<i>Thelymitra ixioides</i>	Orchidaceae	Spotted Sun-orchid
<i>Thelymitra rubra</i>	Orchidaceae	Salmon Sun-orchid
<i>Briza maxima</i>	Poaceae	Blowfly grass
<i>Briza minor</i>	Poaceae	Lesser quaking grass
<i>Exocarpos cupressiformis</i>	Santalaceae	Cherry Ballart
<i>Stylidium graminifolium</i>	Stylidiaceae	Grass Trigger plant
<i>Allocasuarina littoralis</i>	Casurinaceae	Black Sheoak
<i>Tetradlea ciliata</i>	Thunbergiaceae	Pink Bells
<i>Pimelea humilis</i>	Thymelaeaceae	Common Rice-flower
<i>Persoonia chamaepeuce</i>	Proteaceae	Dwarf Geebung
<i>Caesia parviflorum..</i>	Asphodelaceae	Pale Grass Lily

After our excursion we gathered with our picnic baskets on the deck of the Elders' unique, sustainable home. Members shared many of their foods with the group in addition to sharing stories.

Fran Hanrahan

December break up at
“Stringybark”

Photos by Carol Hall



Great Southern BioBlitz 2022 Report

By Vireya Jacquard

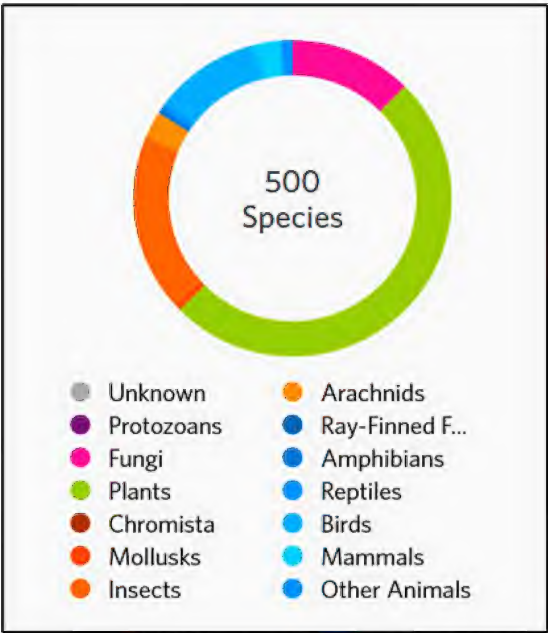
In October we participated in the Great Southern BioBlitz for the third time. Our results were generally an increase on our 2021 performance, with 41 observers recording 1438 observations of 500 species over the four days.

Our area takes in the City of Ballarat, as well as sections of adjoining local government areas.

We had intended to do a couple of concentrated blitzes during the weekend at sites identified by Emily as needing their vegetation class clarified. Bad weather and flooded roads meant we couldn't get to Mt Erip on Saturday, but the weather improved on Sunday and our session at Clarksdale Bird Sanctuary went ahead. Half a dozen people made 237 observations of 110 species during our mini-bioblitz there. Perhaps in future bioblitzes we can visit Mt Erip, or other sites which might benefit from some concentrated observing.

Here's what we saw:

249 species of plants: (50%)
90 species of insects 90 (18%)
62 fungi (12.5%)
54 birds (11%)
14 arachnids (3%)
13 mammals
6 other animals (worms, myriapods, planarians)
3 each of reptiles, amphibians, and molluscs



Our species totals may go up over time, as many observations are not yet fully identified, particularly among the fungi and insects. 41%, or 594 observations, still need identification. Some may never be properly identified, as photographs may not show important diagnostic features. It can be hard to know what needs to be in the photo when faced with an unknown species!

Our most observed species:
The top 5 are shown in the table.

	Most Observed Species	
	Pink-Bells	19
	Milkmaids	16
	Laughing Kookaburra	15
	Trailing Goodenia	12
	Narrow-leaf Bitter-Pea	11
	Musky Caps	11

Pink bells and trailing goodenia have appeared near the top of the list each year, however that may change in 2023 when the GSB will be held at the end of November.

An interesting difference this year was that 5 birds (kookaburra, crimson rosella, grey fantail, superb fairywren and sulphur-crested cockatoo) appeared among our top 15

species observed. In both 2020 and 2021 there were no birds, only plants, in our top 15.

The most commonly seen mammals were ring-tailed possums and grey kangaroos (7 each). The most observed insect was the yellow admiral butterfly (4). Ruby bonnet was the top fungi (6), and the common eastern froglet was the most commonly seen amphibian (6).

After snow in 2020, and floods in 2022, this year could bring heat-wave conditions, as the Great Southern BioBlitz will take place from 24th to 28th November. In future years it will be held in September, October and November on a rotating basis.



The endangered *Platylobium rotundum*, seen by Val at Sparrow Ground.

Postcard from the air over Bendigo.

On Sunday October 6, while other field nats were enjoying an excursion to Chepstowe, I was up in the air, literally. My daughter Lisa generously organised for me to have an experience flying a light aircraft.



We took off from Bendigo's airfield in a small, single engine, 2-seater airplane and my instructor got us up to around 3,000 ft before I took over the controls over Goornong.

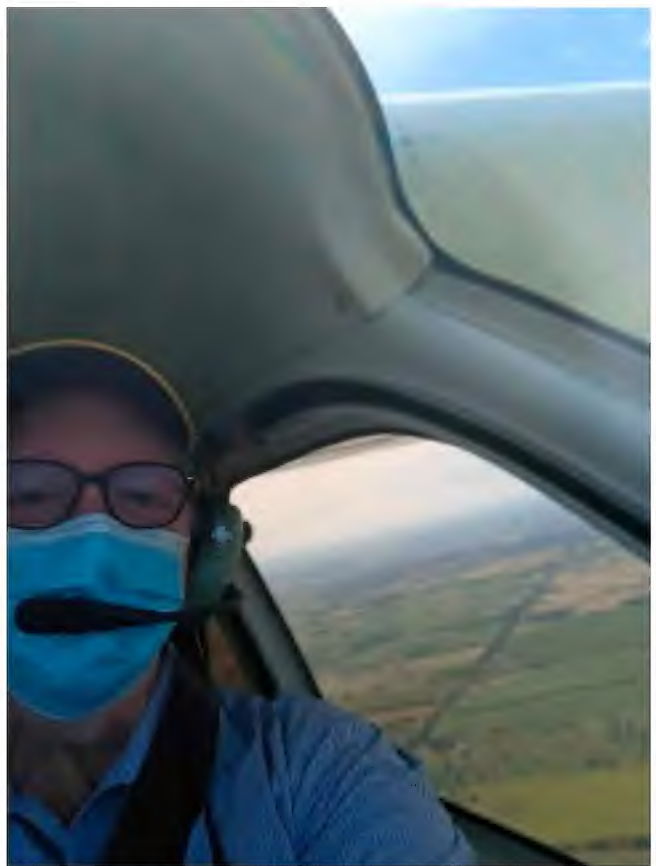
It didn't take long to get used to the controls and we checked all the various instruments that helped to make flying such a wonderful experience. I found it surprisingly easy to do. The joystick and pedals were very responsive and the views were extraordinary!



Flying relatively low gave excellent aerial views of towns, farms, bushland, dams and streams, grazing and cropping paddocks. Quite a number of piggeries and broiler sheds (chickens) were also evident on the outskirts of Bendigo. I flew north following the Northern Highway at about 5000 ft until we reached Rochester. There was still evidence of flooding around the township and along the way, but less obvious in town itself. Lots of water still pooled on paddocks and along roadsides, plus scouring where the topsoil had been washed away, and discolouring of crops generally.

It couldn't last forever, so after about 30 minutes, I headed south again using first Mt. Alexander and then the Great Stupa, north west of the city, as landmarks. The Great Stupa can be seen from quite a long way away and, being white and shiny, it makes a particularly good landmark. I spent about an hour in the air and enjoyed the entire experience. I recommend it to get a totally different outlook on the world and appreciate better what birds are all about..

Bill Elder



Mystery Creature



At our end-of-year get together Margaret showed us this strange creature whose remains she found on a beach near Barwon Heads in December 2021.

As no-one knew what it was, Vireya offered to put some photos on iNaturalist. The resulting observation is here: <https://www.inaturalist.org/observations/143634058>

It was quickly identified as a Spiny Pipehorse, *Solegnathus spinosissimus*, a species which lives on rocky and coral reefs at depths of over 200 metres. It is normally only seen when its remains wash up on land.

Excerpts from minutes of Club Meeting December 2nd 2022

Held in person and via Zoom

- New members since the October Club Meeting: Amanda Collins, Julie & Scott White, and Neville Oddie, the host/leader of our November field trip to Chepstowe. Please introduce yourself to them when you get a chance.
- Discussed request from Wombat Forestcare for Club representative involvement in photo-shoot for media release protesting VicForest's salvage logging in Wombat Forest, Sunday 11 Dec. Elspeth volunteered to attend as an FNCB representative
- Opportunity to attend an insect survey at the test lights just north of the Olympic Rings at Lake Wendouree on Thurs. 8 Dec. from 8.51pm-9.51pm with members of Ballarat Dark Sky Community. Judith provided more details about the methodology of the surveys. Several members were planning to attend.
- For members' interest, the City of Ballarat's Draft Biodiversity Policy has been approved by Councillors

Show & Tell/ Field Reports

Claire brought in part of a Lapwing Plover's egg, from which the bird did not manage to hatch properly. The first two chicks of the pair that nested in her property hatched successfully and disappeared with their parents when they were just a couple of days old.

John G mentioned the three areas featuring Penny-leaf Flat-pea *Platylobium rotundum* at Woovookarung and noted that Stephanie D had found another at Nerrina Historic Area near the powerline easement. Excitingly, the plants there are forming young seed pods.

Reports:

Revision of Discovering Ballarat's Bushlands: Carol provided an update from the sub-committee, which met on 1st November.

The very wet weather caused the planned site visits to come to a halt in November. The sub-committee is pausing activities for an end-of-year break, and will resume in February.

Treasurer's Report

Opening balance as at Oct. 7:	\$8,769.36
Income	\$1,016.00
Expenses:	\$1,417.50
Closing balance:	\$8,367.86

A brief word on weeds...

Weeds are a human construct. As we recognise plants that provide us with food, medicine, fodder for useful animals, construction materials and all manner of human uses, we also define those unwanted plants, those which are out of place, which are not of much use, or are simply a nuisance in our human environments. They interfere with a variety of human activities, and we look for ways of minimising that interference.

There is a certain amount of irony connected to weeds. In countries such as Israel for example, eucalyptus trees are considered weeds, thriving where they are not wanted because the conditions suit them so well.

As a matter of history, a huge number of plants were introduced to Australia in the earliest days of colonisation as useful plants, or at the very least that reminded the invaders of “home”. The list is long. We have spent much time and money trying, with varying levels of success, to get rid of or control weeds. Many methods have been developed to suppress or eliminate them. The financial cost of weed control each year is huge, as is the human effort involved in control. The fact that so many plants survive so well in our often harsh environments says a lot about the plants as successful organisms. Rather than hated, they should be admired for their resilience and persistence.

The topic of weeds is a worthy one for field naturalists to study, and knowledge of weeds as plants can give us a better understanding of natural environments and their management. So, in order to gain that understanding, we present a series of articles about weeds – or rather, plants that are growing in places where they are not wanted by humans. Each month or so, we will focus on one plant which is considered a weed and explain how it is a weed, how it spreads, how it got here, and other related information such as methods of control.

“Weed of the Month”

Bluebell Creeper (*Billardiera fusiformis*)

I find it hard to believe that this bushland weed is sold as a garden ornamental plant at local nurseries, who should probably know better. There is also no doubt that it is an attractive plant with bright, shiny foliage, contrasting blue flowers and beautiful coloured fruits that change colour as they mature. This plant is in fact a native of Western Australia, but in the Eastern states it is so successful that it quickly becomes invasive and dangerous in open woodland in particular.

As a creeper, it tends to smother other plants in a similar way to *Clematis* sp. Unlike this species, however, it does not die back after flowering and setting seed.

The attractive fruit of Bluebell Creeper varies in colour with its stage of maturity (like a banana), from pale green to blue and then wine-dark purple. The fruits are eaten by birds, insects, and mammals that subsequently spread the seed in their droppings. Each fruit contains up to 50 seeds.



Originally classified as *Sollya heterophylla*, the genus has been recently reviewed and is now represented by two species – *Billardiera heterophylla* and *Billardiera fusiformis*. It is also reportedly a valuable bush tucker plant.

By any measure of invasiveness, Bluebell Creeper fits the bill perfectly. It is easily spread by more than one mechanism (seeds, root growth) and generally thrives in a range of climatic conditions.

The photo is from Brown's Rd, Scarsdale where over the past four or five years a single plant has spread over some 100m of roadside reserve on both sides of the bitumen.—

According to the AgVic website below, Bluebell Creeper is classified as a Medium risk weed. Efforts to eradicate populations in natural environments are encouraged. The usual methods of control can be successfully employed, but simply pulling the plants out of the ground is probably the easiest and most effective. If removed early, the root system is not so extensive. Pulling or digging out seedlings and saplings is best done when the soil is moist.

On larger specimens, cutting or scraping the stem and swabbing with recommended herbicide is more time-consuming and requires care and the proper precautions. Finally, spraying with a broad-leaf or non-selective herbicide where the risk of off-target damage to native plants is low is also quite effective.

Information sourced from:

Agriculture Victoria https://vro.agriculture.vic.gov.au/dpi/vro/vrosite.nsf/pages/invasive_bluebell_creeper

Goolwa to Wellington local action planning association

<http://www.gwlap.org.au/>

Bill Elder

Club Planning for 2023

The committee are calling for ideas for guest speakers, topics, field trip destinations, and volunteer leaders.

Also needed are volunteers to write up the guest speaker presentations or excursion reports for the Newsletter, so that different members contribute each month.

Please contact Margaret or Emily to offer your services or ideas.

Future Events

Friday Feb 3rd 7.30 pm at Federation Uni Gillies St Campus (corner of Gillies and Gregory Sts, Lake Wendouree), and on Zoom.
Guest Speaker: Ian Ashton of Birdlife Australia

Sunday Feb 5th 8.30 am. Excursion to view the bird life of the Western Treatment Plant. Leader John Gregurke.
Note: Bookings to attend must have been made by 24th January, due to car permits needed for entry.

Tuesday Feb 21st Committee meeting. Contact Emily for details.

Friday March 3rd 7.30 pm at Fed Uni Gillies St, and on Zoom.
AGM and members' images on the theme of "Natural Engineering".
Bring photos on a USB stick, or email to Graeme:

Sunday March 5th Excursion to Melton Botanic Gardens — details soon.

April 28th-30th SEANA Autumn Camp at Port Campbell hosted by Timboon FNC

Committee

President	Margaret Rich
Secretary	Emily Noble
Treasurer	Kathy Elder
Committee	Andy Arnold
	Bill Elder
	Val Hocking
	Graeme Lunt
	John Petheram

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Meetings - in person at Fed Uni building, cnr Gillies and Gregory Sts, Wendouree, and via Zoom, as advised.

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